Annals of Otology, Rhinology & Laryngology 118(12):894-906.
© 2009 Annals Publishing Company. All rights reserved.

2009 ANNUAL INDEX

AUTHORS

Abdel Maged KH, 362
Adams JC, 435
Ahn Y, 253
Albera R, 287, 625
Aly BH, 362
Amin SM, 362
Anderson LC, 687
Arai Y, 307
Arêas EPG, 461
Armas GL, 270
Asanau A, 639
Azadarmaki R, 587

Badizadegan K, 817
Bahmad F Jr, 670
Baker JJ, 500
Balatsouras D, 13
Balm AJM, 276
Bankert RB, 866
Barbieri SS, 218
Bartley J, 326
Belafsky PC, 247
Bell EF, 750
Bent JP, 160, 469 (book reviews); 698
Ben-Yaakov A, 374
Beretta L, 227
Berk R, 292, 519
Berkowitz RG, 791
Bernal-Sprekelsen M, 552
Bernstein JM, 866
Bezerra RL, 670
Bhattacharyya N, 185, 651
Bilgen AS, 881
Björck G, 506
Bless DM, 131
Blomeyer BD, 662
Blumin JH, 481, 677
Bogaardt H, 241
Bolger WE, 621
Bonte K, 276
Bossi A, 205
Botti JJ, 21
Boyev KP, 356
Bozdemir K, 881
Branski RC, 218
Brasnu DF, 543, 827
Brehm SB, 581
Brigger MT, 56
Broadbelt NV, 218
Brookes JT, 750
Brooks SP, 866
Bruggeman CE, 241
Burgess BJ, 435
Burkhart HM, 750
Burns JA, 321, 399; suppl 201
Bussi M, 227
Butler SG, 99, 190

Caballero M, 552
Canale A, 287, 625
Caovilla HH, 113
Capaccio P, 205
Carlisle M, 519
Carney GM, 356
Casper K, 44
Castellanos PF, 91
Catalano PJ, 107; 542 (letter to editor)
Çetin H, 881
Chang P-H, 211
Chen J, 218
Cheung EJ, 21
Chheda NN, 166
Cho JH, 721, 769
Choi SS, 267
Chole RA, 391
Chong PST, 56
Christenson T, 81
Christiansen H, 662
Chun R, 495
Cieszyńska J, 686 (letter to editor)
Clark ED, 475
Clifford RE, 417
Clift JM, 356
Clinger JD, 630
Cognetti DM, 645
Cohen AP, 781
Collin RWJ, 313, 382
Coticchia J, 292, 519
Cremers CWRJ, 199, 313, 382, 525, 693
Crevier-Buchman L, 827
Cuccarini V, 205
Curry J, 27, 81, 645
Curry WT Jr, 703

Dagan Y, 179
Dagna F, 287
Dan O, 465
Danielides V, 13
da Silva MA, 461
David EF, 512
Day TA, 546
de Alarcon A, 581, 781
Değer HM, 881
Deggouj N, 336
de Heer A-MR, 313, 382
DelGaudio JM, 1
DePalma SR, 670
De Raeve L, 336
De Siena L, 625
Desloovere C, 336
Deutsch ES, 81
de Wolf MJF, 525
Dhooge I, 336
Dickson JM, 37
Dikkers FG, 329
Dinces E, 470 (book review)
Doljansky J, 179
Domenech J, 552
Dozier TS, 546
Du W, 519
Duberstein A, 519

Eavey RD, 397 (memorial)
Edgar JD, 759
Elackattu A, 817
Eliashar R, 374
Ezzat WH, 645

Fan E, 575
Fedok F, 21
Feinberg S, 321
Feld MS, 817
Félix-Trujillo MM, 859
Felsen D, 218
Fischer TC, 160 (book review)
Fletcher AM, 475
Fokkens WJ, 241
Ford CN, 405
Forer M, 764
Fracchiolla NS, 205
Fraioli R, 470, 756 (book reviews)
French LC, 51
Friedman AD, 465
Friedman AM, suppl 201
Fujimaki Y, 532

Gacek RR, 845
Galiana R, 442
Gallagher G, 817
Ganança CF, 113
Ganança FF, 113
Ganança MM, 113
Garcia D, 428
Garetz SL, 757
Garrido-Fernandez P, 409
Ge PJ, 51
Gemma M, 227
Germa JR, 442
Gillespie MB, 546
Gioia L, 227
Goldberg BB, 645
Goldenberg D, 21
Golub JS, 1
Graham SM, 630
Green A, 179
Greenlee JDW, 630
Greinwald J, 781
Grillone G, 817
Groblewski JC, 592
Gross M, 374
Gundlapalli AV, 471
Gupta H, 486 (commentary)
Gurgel RK, 471
Gutmark E, 44, 232

Annals of Otology, Rhinology & Laryngology 118(12):894-906.
© 2009 Annals Publishing Company. All rights reserved.

2009 ANNUAL INDEX

AUTHORS

Abdel Maged KH, 362
Adams JC, 435
Ahn Y, 253
Albera R, 287, 625
Aly BH, 362
Amin SM, 362
Anderson LC, 687
Arai Y, 307
Arêas EPG, 461
Armas GL, 270
Asanau A, 639
Azadarmaki R, 587

Badizadegan K, 817
Bahmad F Jr, 670
Baker JJ, 500
Balatsouras D, 13
Balm AJM, 276
Bankert RB, 866
Barbieri SS, 218
Bartley J, 326
Belafsky PC, 247
Bell EF, 750
Bent JP, 160, 469 (book reviews); 698
Ben-Yaakov A, 374
Beretta L, 227
Berk R, 292, 519
Berkowitz RG, 791
Bernal-Sprekelsen M, 552
Bernstein JM, 866
Bezerra RL, 670
Bhattacharyya N, 185, 651
Bilgen AS, 881
Björck G, 506
Bless DM, 131
Blomeyer BD, 662
Blumin JH, 481, 677
Bogaardt H, 241
Bolger WE, 621
Bonte K, 276
Bossi A, 205
Botti JJ, 21
Boyev KP, 356
Bozdemir K, 881
Branski RC, 218
Brasnu DF, 543, 827
Brehm SB, 581
Brigger MT, 56
Broadbelt NV, 218
Brookes JT, 750
Brooks SP, 866
Bruggeman CE, 241
Burgess BJ, 435
Burkhart HM, 750
Burns JA, 321, 399; suppl 201
Bussi M, 227
Butler SG, 99, 190

Caballero M, 552
Canale A, 287, 625
Caovilla HH, 113
Capaccio P, 205
Carlisle M, 519
Carney GM, 356
Casper K, 44
Castellanos PF, 91
Catalano PJ, 107; 542 (letter to editor)
Çetin H, 881
Chang P-H, 211
Chen J, 218
Cheung EJ, 21
Chheda NN, 166
Cho JH, 721, 769
Choi SS, 267
Chole RA, 391
Chong PST, 56
Christenson T, 81
Christiansen H, 662
Chun R, 495
Cieszyńska J, 686 (letter to editor)
Clark ED, 475
Clifford RE, 417
Clift JM, 356
Clinger JD, 630
Cognetti DM, 645
Cohen AP, 781
Collin RWJ, 313, 382
Coticchia J, 292, 519
Cremers CWRJ, 199, 313, 382, 525, 693
Crevier-Buchman L, 827
Cuccarini V, 205
Curry J, 27, 81, 645
Curry WT Jr, 703

Dagan Y, 179
Dagna F, 287
Dan O, 465
Danielides V, 13
da Silva MA, 461
David EF, 512
Day TA, 546
de Alarcon A, 581, 781
Değer HM, 881
Deggouj N, 336
de Heer A-MR, 313, 382
DelGaudio JM, 1
DePalma SR, 670
De Raeve L, 336
De Siena L, 625
Desloovere C, 336
Deutsch ES, 81
de Wolf MJF, 525
Dhooge I, 336
Dickson JM, 37
Dikkers FG, 329
Dinces E, 470 (book review)
Doljansky J, 179
Domenech J, 552
Dozier TS, 546
Du W, 519
Duberstein A, 519

Eavey RD, 397 (memorial)
Edgar JD, 759
Elackattu A, 817
Eliashar R, 374
Ezzat WH, 645

Fan E, 575
Fedok F, 21
Feinberg S, 321
Feld MS, 817
Félix-Trujillo MM, 859
Felsen D, 218
Fischer TC, 160 (book review)
Fletcher AM, 475
Fokkens WJ, 241
Ford CN, 405
Forer M, 764
Fracchiolla NS, 205
Fraioli R, 470, 756 (book reviews)
French LC, 51
Friedman AD, 465
Friedman AM, suppl 201
Fujimaki Y, 532

Gacek RR, 845
Galiana R, 442
Gallagher G, 817
Ganança CF, 113
Ganança FF, 113
Ganança MM, 113
Garcia D, 428
Garetz SL, 757
Garrido-Fernandez P, 409
Ge PJ, 51
Gemma M, 227
Germa JR, 442
Gillespie MB, 546
Gioia L, 227
Goldberg BB, 645
Goldenberg D, 21
Golub JS, 1
Graham SM, 630
Green A, 179
Greenlee JDW, 630
Greinwald J, 781
Grillone G, 817
Groblewski JC, 592
Gross M, 374
Gundlapalli AV, 471
Gupta H, 486 (commentary)
Gurgel RK, 471
Gutmark E, 44, 232

Hahn MS, 299
Halmos GB, 329
Halum SL, 687, 887
Han D, 575, 656
Handler EB, 481
Hans S, 827
Har-El G, 399
Harirchian S, 118
Hart CK, 839
Hartl DM, 827
Hasegawa N, 532
Harabuchi Y, 773
Harker L, 113
Hartl DM, 543
Hartley BEJ, 786
Hartnick CJ, 56
Hattori R, 67, 536
Haupert M, 519
Hawkins JF, 887
Healy D, 714
Heaton JT, 321
Henderson AH, 247
Henkin Y, 350
Heyman Z, 179
Hiatt KK, 887
Hıdır Y, 570
Hillman RE, suppl 201
Hirano S, 405, 559, 606, 613, 735, 805
Hitchon PW, 630
Hoa M, 292
Hoffman H, 475; 486 (commentary)
Hoffman MR, 124
Hol MKS, 525
Holman AS, 703
Holsinger FC, 428
Hong S-C, 721
Hossain J, 81
Hou L, 656
Hsu C-M, 270
Hu H, 575
Hu R, 656
Huang J, 764
Huang S-F, 211
Hundal JS, 148
Hunter EJ, 449
Hunter J, 160 (book review)
Huygen PLM, 313, 382
Hydman J, 73, 506
Hyodo M, 307

Iida M, 833
Illing EA, 887
Iseli TA, 630
Ishai R, 556
Ishimoto S, 532
Ito J, 606, 613, 805
Ivey CM, 833

Jackman AH, 469 (book review)
Jacobs I, 81
Jang YJ, 488
Jiang JJ, 124, 154, 598
Johns MM III, 1
Johnston DR, 27
Johnston N, 677
Jones DD, 435
Jothi S, 714
Jung JY, 391
Jung K, 662

Kabani S, 817
Kanemaru S, 606, 613, 805
Kang HJ, 721
Karnell LH, 486 (commentary); 630
Katotomichelakis M, 13
Kelchner LN, 581
Kelly MP, 598
Kemp S, 99
Kepnes LJ, 651
Khosla S, 44, 232
Kim JK, 721, 769
Kim JM, 488
Kim JS, 281
Kim KH, 253
Kincaid JC, 887
King R, 232
Kinoshita M, 532
Kishimoto Y, 405, 606, 613, 805
Kitagawa N, 172
Kitani Y, 805
Klein AM, 1
Kobayashi K, 796
Kojima T, 613, 805
Kondo S, 172
Koo J-W, 281
Koops J, 241
Kos MP, 512
Kraus DH, 218
Krausert CR, 598
Kremer H, 313, 382
Krishna P, 218
Kronenberg J, 350
Kuczkowski J, 686 (letter to editor)
Kuehn DM, 475
Kuhn FA, 708
Kutluhan A, 881
Kwon T-K, 253

Laccourreye O, 428
Lacilla M, 287, 625
Lahav Y, 179, 321
Lal P, 636
Lalwani AK, 118
Ledl C, 876
Lee DH, 391
Lee H-M, 721
Lee T-J, 211
Lehman HK, 866
Leopold DA, 500
Levine MS, 811
Lewis JE, 368
Lim JH, 1
Lin HW, 703
Lohuis PJFM, 276
Lombard B, 728
Lopez-Escamez JA, 409
Lopez-Guerra G, suppl 201
Lorenz RR, 465
Lott DG, 465
Lozano A, 442
Lozano-Morales R, 859
Luginbuhl A, 742
Lund G, 471
Lutch M, suppl 201

Magliulo G, 345
Mahieu HF, 512
Majima Y, 67, 536
Mallur PS, 118
Maly B, 374
Mankarious LA, 139
Maños M, 442
Mardirossian V, 817
Markley L, 190
Martin C, 639
Martínez García M, 442
Martin-Harris B, 546
Matsui O, 172
Matthias C, 662
Mattsson P, 73, 506
Maune S, 399
McGee S, 817
McRae BR, 887
Meinzen-Derr J, 37, 581, 781
Melroy CT, 708
Ménard M, 428
Merati AL, 481
Merchant SN, 435, 670
Mertl-Roetzer M, 876
Merton DA, 645
Mesia R, 442
Middendorf J, 581
Miele A, 852
Migirov L, 350
Mirkovic J, 817
Mirza N, 587, 811
Miyake M, 796
Moore EJ, 368
Mortensen M, 833
Morton RP, 326
Mulder JJS, 693
Mullin D, 714
Muñoz-Pinto D, 299
Murono S, 172
Murugappan S, 44, 232
Mylanus EAM, 525, 693

Nakamura T, 606, 796, 805
Nakashima M, 172
Nakashima T, 30, 773
Naser AY, 362
Nason R, 391
Navarrete P, 552
Nguyen CV, 698
Nguyen SA, 546
Nikolettos N, 13
Nishino H, 307
Nogués J, 442
Nomoto Y, 796
Nonaka S, 773
Norman MF, 811

O'Brien EK, 500
Offeciers E, 336
Ohashi T, 307
Ohno S, 805
Ohno T, 51, 559, 735
Okada K, 532
Okano W, 796
Oliveira CA, 670
O'Malley JT, 435
Omori K, 796

Oostrik J, 382
Oren L, 44, 232
Osipov V, 481
Ossoff RH, 559
Ottaviani F, 205
Ow TJ, 469, 470 (book reviews)
Oyer SL, 687

Pallavicino F, 625
Paniello RC, 759
Pappacena M, 852
Parikh SR, 698
Park HH, 721
Payne SC, 107
Peleg U, 565
Pennings RJE, 199
Perez R, 565
Perlmutter JS, 759
Perotti M, 625
Persson JKE, 506
Piccioni LO, 227
Pierce E, 6
Pignataro L, 205
Pilowsky PM, 791
Pires VL, 139
Pistey R, 817
Pitman M, 612 (book review)
Plichta L, 686 (letter to editor)
Poage DP, 500
Pons Y, 728
Pope L, 866
Poppas DP, 218
Postma GN, 166
Prades E, 552
Prades J-M, 639
Preciado DA, 495
Prendes B, 811
Preston TW, 475
Pribitkin EA, 645
Pritchett CV, 368
Purkey MT, 811

Quesnel AM, 703

Ramadan HH, 161
Ramírez JE, 859
Randolph GW, 56
Rasmussen B, 781
Rees C, 190, 247
Regner MF, 154
Reid D, 326
Renukaswamy GM, 786
Rho MB, 703
Richardson BE, 500
Richter GT, 37, 259
Rieves AL, 124, 154
Riga M, 13
Rinaldi V, 852
Robey AB, 500
Robinson RA, 486 (commentary)
Rödel RMW, 662
Rogers RA, 417
Roguin N, 556
Rosen D, 645
Rosen MR, 27
Rosenberg TL, 87
Rosenblatt W, 148
Rosenzweig E, 179
Rousseau B, 51, 559, 735
Rubin R, 27
Rutter MJ, 37, 259
Ryan MM, 791

Sachdeva L, 292
Sacks R, 764
Saltman B, 218
Salvinelli F, 852
Şalvız M, 881
Samet A, 556
Samuels TL, 677
Sanada J, 172
Sanders M, 742
Sands A, 866
Sarı N, 881
Sasaki CT, 148
Sato K, 30, 773
Schade RR, 166
Scherf F, 336
Schiff B, 469, 756 (book reviews)
Schwartz Y, 565
Schweinfurth JM, 87
Scott AR, 56
Seccia V, 428
Seidman CE, 670
Seidman JG, 670
Sennes LU, 461
Seybt MW, 166
Shah RK, 495, 592
Shaha AR, 479 (commentary)
Shapshay S, 399
Sharp DB, 91
Shaw GY, 6
Shimizu S, 67, 536
Shimizu T, 67, 536
Shin H-W, 253
Shipchandler TZ, 465
Shiraishi A, 532
Shott G, 781
Shultz LD, 866
Sichel J-Y, 565
Simopoulou M, 13
Simpson CB, 481
Smith DI, 368
Smith MC, 750
Smith RJH, 486 (commentary); 750
Snik AFM, 693
Soliman AMS, 587; 754 (memorial)
Soma MA, 786
Spanos WC, 750
Spiro JD, 742
Stavinoha RC, 356
Strome M, 465
Stuart A, 99, 190
Stupak HD, 612 (book review)
Sturman A, 556
Su C-Y, 270
Suehiro A, 405, 606, 805
Suh M-W, 281
Sung M-W, 253
Swanson ER, 559
Syamal M, 292, 519

Takatsu M, 307
Takazoe M, 532
Talmon Y, 556
Tamir S, 565
Tan ML, 276
Tanaka S, 405
Tanna N, 267
Tao C, 154
Tateya I, 606, 805
Thakar A, 636
Theodosopoulos PV, 839
Thompson DM, 37, 259
Thompson JW, 397 (memorial)
Timoshenko AP, 639
Titze IR, 449
Tomaz A, 113
Tornero J, 442
Tripsianis G, 13
Trivelli M, 852
Tsuji A, 172
Tsuji DH, 461
Tsunoda K, 532

Ukpo OC, 368
Umeda H, 805
Umeno H, 773
Uwiera TC, 781

Vacher C, 428
Vaissière J, 827
Valdez-Martínez E, 859
Van Daele D, 475
van Dam D, 241
Van de Heyning P, 336
van den Brekel MWM, 276
van der Laan BFAM, 329
Van Deun L, 336
van Wieringen A, 336
Verhaegen VJO, 693
Verma R, 636
Vermeersch HB, 276
Vercherin P, 639
Viciana D, 409
Vivas EX, 160 (book review)

Wada I, 796
Wadie M, 148
Wagner H Jr, 21
Wakisaka N, 172
Wang L, 656
Wang Z, 817
Weaver AL, 368
Weinberger JM, 374
Weinrich B, 581
Weksler BB, 218
Welham NV, 131
Wells CW, 677
Wever NM, 241
Weymuller EA Jr, 542 (letter to editor)
Whittaker P, 299
Wiikmann C, 461
Witt RE, 154
Wolff HA, 662
Wong RD, 356
Woo J-S, 148
Woo P, 833
Wootten CT, 259

Wouters J, 336
Wuyts FL, 336

Xu W, 575, 656

Yalçıner G, 881
Yamashita M, 131
Yeo N-K, 488
Yetiser S, 570
Yoo JH, 488
Yoo MJ, 559
Yoshizaki T, 172
Yu C-C, 817

Zalzal GH, 495, 592
Zealear DL, 51
Zedenius J, 506
Zeitels SM, 321, 399; suppl 201
Zhang Y, 598
Zhuang P, 154
Zimmer LA, 839
Zuliani G, 519
Zur K, 81

SUBJECTS

Abscess
Preoperative and postoperative intracranial complications of acute mastoiditis, 118

Acoustics
Flow fields and acoustics in unilateral scarred vocal fold model, 44
Long-term acoustic comparison of thyroplasty versus autologous fat injection, 827

Acute mastoiditis
Acute mastoiditis in children: is computed tomography always necessary? 565

Acute myopericarditis
Acute myopericarditis complicating acute tonsillitis: prospective study, 556

Acute otitis externa
Change of external auditory canal pH in acute otitis externa, 769

Adenotonsillectomy
Efficacy and safety of adenotonsillectomy for pediatric obstructive sleep apnea in Prader-Willi syndrome, 267

Age
Age-associated changes in expression and deposition of vocal fold collagen and hyaluronan, 735
Flexible endoscopic evaluation of swallowing in healthy young and older adults, 99
Inflammatory cytokine response to injury in aging rabbit subglottis, 139
Penetration and aspiration in healthy older adults as assessed during endoscopic evaluation of swallowing, 190

Airflow
Effect of dehydration on phonation threshold flow in excised canine larynges, 154
Indirect estimation of laryngeal resistance via airflow redirection, 124

Airway
A case for increased research on pediatric upper airway, 757
Clinical outcomes of bedside percutaneous dilatational tracheostomy with suspension laryngoscopy for airway control, 91
Hypertrophic anterior cervical osteophytes causing dysphagia and airway obstruction, 703
Secondary airway lesions in infants with laryngomalacia, 37
Unilateral true vocal fold synkinesis presenting with airway obstruction, 587

Analgesia
Ropivacaine peritonsillar infiltration for analgesia after adenotonsillectomy in children: randomized, double-blind, placebo-controlled study, 227

Anesthesia
Monitored anesthesia care with target-controlled infusion in vibroplasty, 625

Angiofibroma
Endoscopic resection of juvenile nasopharyngeal angiofibroma, 764

Antigen
Prostaglandin E2 receptor EP2, EP3, and EP4 agonists inhibit antigen-induced mucus hypersecretion in nasal epithelium of sensitized rats, 536
Th2 cytokine inhibitor suplatast tosilate inhibits antigen-induced mucus hypersecretion in nasal epithelium of sensitized rats, 67

Anxiety
Influence of anxiety and depression on predictive value of Reflux Symptom Index, 687

Apnea
Efficacy and safety of adenotonsillectomy for pediatric obstructive sleep apnea in Prader-Willi syndrome, 267
Sleep-related deglutition in patients with sleep apnea-hypopnea syndrome, 30
Tongue base ultrasound: diagnostic tool for predicting obstructive sleep apnea, 179

Approach
Anatomic study of middle fossa approach landmarks using image guidance system, 728
Endoscopic approach for pituitary surgery improves rhinologic outcomes, 630

Artery
Sphenopalatine and anterior ethmoidal artery ligation for severe epistaxis, 639

Aspergilloma
Characteristics of isolated sphenoid sinus aspergilloma: report of twelve cases and literature review, 211

Aspiration
Impact of supraglottoplasty on aspiration in severe laryngomalacia, 259
Modulating effects of hypoxia and hypercarbia on glottic closing force, 148
Predictors of aspiration pneumonia following radiotherapy for head and neck cancer, 811

Asthma
Additional disease burden from hay fever and sinusitis accompanying asthma, 651

Atelocollagen
Atelocollagen sponge as stem cell implantation scaffold for treatment of scarred vocal folds, 805
Implantation of atelocollagen sheet for treatment of vocal fold scarring and sulcus vocalis, 613

Atresia
Acquired atresia of external auditory canal: recurrence and long-term results, 345

Atticotomy
Postauricular approach atticotomy: modified closed technique with reconstruction of scutum with cymbal cartilage, 199

Balloon
Balloon dilation of frontal recess in patients with chronic frontal sinusitis and advanced sinus disease: initial report, 107
Endoscopic balloon dilation sinuplasty including ethmoidal air cells in chronic rhinosinusitis, 881
Safety and feasibility of balloon sinuplasty for treatment of chronic rhinosinusitis in children, 161

Basic fibroblast growth factor
Regenerative effects of basic fibroblast growth factor on extracellular matrix production in aged rat vocal folds, 559

Bevacizumab
Microlaryngoscopic and office-based injection of bevacizumab (Avastin) to enhance 532-nm pulsed KTP laser treatment of glottal papillomatosis, suppl 201

Bilateral cochlear implantation
Three-year postimplantation auditory outcomes in children with sequential bilateral cochlear implantation, 336

Bilaterality
Impact of bilaterality and headache on health-related quality of life in Meniere's disease, 409

Bioengineering
Bioengineered trachea with fibroblasts in rabbit model, 796

Biofilm
Biofilm density in pediatric nasopharynx: recurrent acute otitis media versus obstructive sleep apnea, 519
Demonstration of nasopharyngeal and middle ear mucosal biofilms in animal model of acute otitis media, 292

Blood pressure
Influence of blood pressure manometer feedback on parameters of vestibular evoked myogenic potential test, 281

Bone
Radiographic and micro–computed tomographic imaging of lipopolysaccharide-mediated bone resorption, 391

Bone-anchored hearing aid
Bone-anchored hearing aid surgery in older adults: implant loss and skin reactions, 525
Profound mixed hearing loss: bone-anchored hearing aid system or cochlear implant? 693

Book Reviews
Ars B, ed. *Chronic Otitis Media: Pathogenesis Oriented Therapeutic Management*, 160
Barnes L, ed. *Surgical Pathology of the Head and Neck*, 756
Blitzer A, Schwartz JS, Song P, Young N. *Oxford American Handbook of Otolaryngology*, 160
Fried MP, Ferlito A, eds, and Rinaldo A, Smith RV, associate eds. *The Larynx*, 612
Friedman M, ed. *Sleep Apnea and Snoring: Surgical and Nonsurgical Therapy*, 612
Gemsenjaeger E. *Atlas of Thyroid Surgery: Principles, Practice, and Clinical Cases*, 469
Myers EN, Johnson JT. *Tracheotomy: Airway Management, Communication, and Swallowing*, 469
Papel ID, Frodel JL, Holt GR, et al, eds. *Facial Plastic and Reconstructive Surgery*, 756
Sanna M, Khrais T, Mancini F, Russo A, Taibah A. *The Facial Nerve in Temporal Bone and Lateral Skull Base Microsurgery*, 470
Schuenke M, Schulte E, Schumacher U. *Thieme Atlas of Anatomy: Head and Neuroanatomy*, 160
Sharav Y, Benoliel R. *Orofacial Pain and Headache*, 470
Shin JJ, Hartnick CJ, Randolph GW, eds. *Evidence-Based Otolaryngology*, 469
Thaler ER, Kennedy DW, eds. *Rhinosinusitis: A Guide for Diagnosis and Management*, 469

Botulinum toxin
Vocal exercise versus voice rest following botulinum toxin injections: randomized crossover trial, 759

Bronchoscopy
Utility of bronchoscopy for recurrent croup, 495

Calcium
Effectiveness of calcium hydroxylapatite paste in vocal rehabilitation, 546

Canal
Acquired atresia of external auditory canal: recurrence and long-term results, 345

Cancer
Advanced oral tongue cancer in 22-year-old pregnant woman, 21
Endoscopic laser resection of laryngeal cancer: is it oncologically safe? Position statement from the American Broncho-Esophagological Association, 399
Concurrent intra-arterial chemotherapy and radiotherapy for advanced laryngeal cancer, 172

Carcinoma
Clinicopathologic features and outcome of oncocytic variant of papillary thyroid carcinoma, 374
Human papillomavirus–associated oropharyngeal squamous cell carcinomas: primary tumor burden and survival in surgical patients, 368

Cartilage
Measurement of cross-sectional dimensions of cricoid cartilage: computed tomographic study, 253

Catheter
Safety of ethmoid sinus drug-eluting catheter insertion, 708

CD44
Expression and distribution of hyaluronic acid and CD44 in unphonated human vocal fold mucosa, 773

Cell
Cell density of lamina propria of neonatal vocal folds, 87

Celloidin
Techniques of celloidin removal from temporal bone sections, 435

Cellularity
Lamina propria cellularity and collagen composition: integrated assessment of structure in humans, 299

Cerebrospinal fluid
Delayed cerebrospinal fluid leak following septoplasty, 636

Cerumen
Randomized, placebo-controlled evaluation of chlorobutanol, potassium carbonate, and irrigation in cerumen removal, 552

Cervical cleft
Midline cervical cleft: rare congenital anomaly, 786

Chemotherapy
Concurrent intra-arterial chemotherapy and radiotherapy for advanced laryngeal cancer, 172
Editorial. Chemotherapy alone for glottic carcinoma: need for higher-level evidence, 543

Chlorobutanol
Randomized, placebo-controlled evaluation of chlorobutanol, potassium carbonate, and irrigation in cerumen removal, 552

Cholesteatoma
Postauricular approach atticotomy: modified closed technique with reconstruction of scutum with cymbal cartilage, 199

Cleft
Midline cervical cleft: rare congenital anomaly, 786

Click
Clinical significance of summating potential–action potential ratio and action potential latency difference for condensation and rarefaction clicks in Meniere's disease, 307

Cochlear implant
Profound mixed hearing loss: bone-anchored hearing aid system or cochlear implant? 693
Self-reported listening habits and enjoyment of music among adult cochlear implant recipients, 350
Three-year postimplantation auditory outcomes in children with sequential bilateral cochlear implantation, 336

Cohen, Seymour R., MS, MD, 397

Collagen
Age-associated changes in expression and deposition of vocal fold collagen and hyaluronan, 735
Lamina propria cellularity and collagen composition: integrated assessment of structure in humans, 299

Commentary
Commentary on "Dysplasia in Adults With Recurrent Respiratory Papillomatosis: Incidence and Risk Factors," 486
Localization of recurrent thyroid cancer: technical challenge, 479

Complication
Bone-anchored hearing aid surgery in older adults: implant loss and skin reactions, 525
Preoperative and postoperative intracranial complications of acute mastoiditis, 118

Compression
Radiographic analysis of cochlear nerve vascular compression, 356

Computed tomography
Acute mastoiditis in children: is computed tomography always necessary? 565

Contralateral involvement
Hearing loss progression and contralateral involvement in children with unilateral sensorineural hearing loss, 781

Cornu
Superior thyroid cornu syndrome: unusual cause of cervical dysphagia, 833

Cricoid cartilage
Measurement of cross-sectional dimensions of cricoid cartilage: computed tomographic study, 253

Crohn's disease
Recurrent hoarseness due to inflammatory vocal fold lesions in patient with Crohn's disease, 532

Croup
Utility of bronchoscopy for recurrent croup, 495

Cyst
Efficacy and safety of adenotonsillectomy for pediatric obstructive sleep apnea in Prader-Willi syndrome, 267

Cytokine
Inflammatory cytokine response to injury in aging rabbit subglottis, 139
Th2 cytokine inhibitor suplatast tosilate inhibits antigen-induced mucus hypersecretion in nasal epithelium of sensitized rats, 67

Deficiency
Prevalence of vitamin D deficiency among patients attending general otolaryngology clinic in South Auckland, 326

Deglutition
Sleep-related deglutition in patients with sleep apnea-hypopnea syndrome, 30

Dehydration
Effect of dehydration on phonation threshold flow in excised canine larynges, 154

Depression
Influence of anxiety and depression on predictive value of Reflux Symptom Index, 687

Deviation
Use of nasal septal bone to straighten deviated septal cartilage in correction of deviated nose, 488

DFNA15
Mild and variable audiometric and vestibular features in third DFNA15 family with novel mutation in *POU4F3*, 313

DFNA20/26
Audiometric and vestibular features in second Dutch DFNA-20/26 family with novel mutation in *ACTG1*, 382

Digital kymography
Typing vocal fold vibratory patterns in excised larynx experiments via digital kymography, 598

Dilation
Balloon dilation of frontal recess in patients with chronic frontal sinusitis and advanced sinus disease: initial report, 107
Endoscopic balloon dilation sinuplasty including ethmoidal air cells in chronic rhinosinusitis, 881
Groningen dilatation tracheoscope in treatment of moderate subglottic and tracheal stenosis, 329

Diverticulotomy
Endoscopic carbon dioxide laser Zenker's diverticulotomy revisited, 512

Drug-eluting catheter
Safety of ethmoid sinus drug-eluting catheter insertion, 708

Dysphagia
Hypertrophic anterior cervical osteophytes causing dysphagia and airway obstruction, 703
Superior thyroid cornu syndrome: unusual cause of cervical dysphagia, 833

Dysplasia
Commentary on "Dysplasia in Adults With Recurrent Respiratory Papillomatosis: Incidence and Risk Factors," 486 (commentary)
Dysplasia in adults with recurrent respiratory papillomatosis: incidence and risk factors, 481
Initial anatomic geographic presentation of glottal dysplasia, 321

Editorials
A case for increased research on pediatric upper airway, 757
Chemotherapy alone for glottic carcinoma: need for higher-level evidence, 543

Education
Multimodality education for airway endoscopy skill development, 81

Electrocautery
Comparison of intraoperative bleeding between microdebrider intracapsular tonsillectomy and electrocautery tonsillectomy, 698

Electromyography
Clinical and electrophysiological characteristics of larynx in myasthenia gravis, 656
Respiration-related laryngeal electromyography in children with bilateral vocal fold paralysis, 791
Serial electromyography of thyroarytenoid muscles using NIM-Response system in canine model of vocal fold paralysis, 56

Electrostimulation
Use of neuromuscular electrostimulation in treatment of dysphagia in patients with multiple sclerosis, 241

Endoscopy
Anatomy of optic canal: computed tomography study of endoscopic nerve decompression, 839
Endoscopic approach for pituitary surgery improves rhinologic outcomes, 630
Flexible endoscopic evaluation of swallowing in healthy young and older adults, 99
Multimodality education for airway endoscopy skill development, 81
Penetration and aspiration in healthy older adults as assessed during endoscopic evaluation of swallowing, 190
Piezoelectric surgical device in endoscopic sinus surgery: initial clinical experience, 621

Epistaxis
Sphenopalatine and anterior ethmoidal artery ligation for severe epistaxis, 639

Epithelium
Pepsin in nonacidic refluxate can damage hypopharyngeal epithelial cells, 677

Evolution
Fusion as evolutionary principle of vertebrate labyrinth, 845

Exercise
Vocal exercise versus voice rest following botulinum toxin injections: randomized crossover trial, 759

Extended lateral pharyngotomy
Extended lateral pharyngotomy for selected squamous cell carcinomas of lateral tongue base, 428

External auditory canal
Acquired atresia of external auditory canal: recurrence and long-term results, 345

Extracellular matrix
Regenerative effects of basic fibroblast growth factor on extracellular matrix production in aged rat vocal folds, 559

Facelift incision
Superficial parotidectomy via facelift incision, 276

Familial migrainous vertigo
Locus for familial migrainous vertigo disease maps to chromosome 5q35, 670

Fascia
Temporalis fascia and cartilage-perichondrium composite shield grafts for reconstruction of tympanic membrane, 570

Fat
Long-term acoustic comparison of thyroplasty versus autologous fat injection, 827

Fatigue
Quantifying vocal fatigue recovery: dynamic vocal recovery trajectories after vocal loading exercise, 449

Fibroblast
Bioengineered trachea with fibroblasts in rabbit model, 796
Effect of exogenous hepatocyte growth factor on vocal fold fibroblasts, 606
Effect of peroxisome proliferator–activated receptor gamma agonists on myofibroblast differentiation and collagen production in nasal polyp–derived fibroblasts, 721
Effects of transforming growth factor–β1 on human vocal fold fibroblasts, 218

Fibrosclerosis
Unusual fibrosclerotic lesion of laryngotracheal complex presenting as subglottic stenosis, 27

Fluorescence
Anatomy-based algorithms for detecting oral cancer using reflectance and fluorescence spectroscopy, 817

Fungus
The changing face of paranasal sinus fungus balls, 500

Fusion
Fusion as evolutionary principle of vertebrate labyrinth, 845

Genetics
Audiometric and vestibular features in second Dutch DFNA20/26 family with novel mutation in *ACTG1*, 382
Prothrombotic gene mutations in patients with sudden sensorineural hearing loss and cardiovascular thrombotic disease, 205

Glottis
Editorial. Chemotherapy alone for glottic carcinoma: need for higher-level evidence, 543
Initial anatomic geographic presentation of glottal dysplasia, 321
Modulating effects of hypoxia and hypercarbia on glottic closing force, 148

Gore-Tex
Comparative study of vocal outcomes with silicone versus Gore-Tex thyroplasty, 405

Graft
Equine versus bovine pericardium in transmeatal underlay myringoplasty, 287
Human nasal polyp microenvironments maintained in viable and functional state as xenografts in NOD-*scid IL2rγ*^{null} mice, 866
Temporalis fascia and cartilage-perichondrium composite shield grafts for reconstruction of tympanic membrane, 570

Granulation
Tracheal and tracheostomal hypergranulation and related stenosis in long-term cannulated patients: does tracheostomy procedure make difference? 876

Growth factor
Effect of exogenous hepatocyte growth factor on vocal fold fibroblasts, 606
Regenerative effects of basic fibroblast growth factor on extracellular matrix production in aged rat vocal folds, 559

Handicap
Comparison of pediatric Voice Handicap Index scores with perceptual voice analysis in patients following airway reconstruction, 581

Hay fever
Additional disease burden from hay fever and sinusitis accompanying asthma, 651

Headache
Impact of bilaterality and headache on health-related quality of life in Meniere's disease, 409

Health care
Role of otolaryngologists in health care for homeless, 471

Hearing
Hearing loss progression and contralateral involvement in children with unilateral sensorineural hearing loss, 781
Self-reported listening habits and enjoyment of music among adult cochlear implant recipients, 350
Surgical and medical treatment of hearing loss in mixed otosclerosis, 859
Three-year postimplantation auditory outcomes in children with sequential bilateral cochlear implantation, 336

Hearing aid
Bone-anchored hearing aid surgery in older adults: implant loss and skin reactions, 525
Profound mixed hearing loss: bone-anchored hearing aid system or cochlear implant? 693

Hepatocyte growth factor
Effect of exogenous hepatocyte growth factor on vocal fold fibroblasts, 606

Hoarseness
Recurrent hoarseness due to inflammatory vocal fold lesions in patient with Crohn's disease, 532

Homelessness
Role of otolaryngologists in health care for homeless, 471

Human papillomavirus
Human papillomavirus–associated oropharyngeal squamous cell carcinomas: primary tumor burden and survival in surgical patients, 368
Prevalence, morphology, and prognosis of human papillomavirus in tonsillar cancer, 742

Hyaluronan
Age-associated changes in expression and deposition of vocal fold collagen and hyaluronan, 735
Expression and distribution of hyaluronic acid and CD44 in unphonated human vocal fold mucosa, 773

Hydroxylapatite
Effectiveness of calcium hydroxylapatite paste in vocal rehabilitation, 546

25-Hydroxyvitamin D
Prevalence of vitamin D deficiency among patients attending general otolaryngology clinic in South Auckland, 326

Hyperfractionated radiotherapy
Hyperfractionated radiotherapy: improvement of survival in locally advanced nasopharyngeal carcinoma, 442

Iatrogenic injury
Diagnosis and prognosis of iatrogenic injury of recurrent laryngeal nerve, 506

Image guidance system
Anatomic study of middle fossa approach landmarks using image guidance system, 728

Immunohistochemistry
Surgical method to create vocal fold injuries in mice, 131

Implant
Atelocollagen sponge as stem cell implantation scaffold for treatment of scarred vocal folds, 805

Impulse noise
Impulse noise: theoretical solutions to quandary of cochlear protection, 417

Incision
Superficial parotidectomy via facelift incision, 276

Infection
Mycobacterium chelonae infections involving head and neck, 714

Inflammation
Inflammatory cytokine response to injury in aging rabbit subglottis, 139
Recurrent hoarseness due to inflammatory vocal fold lesions in patient with Crohn's disease, 532
Unusual fibrosclerotic lesion of laryngotracheal complex presenting as subglottic stenosis, 27

Infusion
Monitored anesthesia care with target-controlled infusion in vibroplasty, 625

Injury
Characteristics of experimental recurrent laryngeal nerve surgical injury in dogs, 575

Inner ear
Benign paroxysmal positional vertigo: concomitant involvement of different semicircular canals, 113

Intra-arterial chemotherapy
Concurrent intra-arterial chemotherapy and radiotherapy for advanced laryngeal cancer, 172

Isolated sphenoid sinusitis
Characteristics of isolated sphenoid sinus aspergilloma: report of twelve cases and literature review, 211

Juvenile nasopharyngeal angiofibroma
Endoscopic resection of juvenile nasopharyngeal angiofibroma, 764

Kymography
Typing vocal fold vibratory patterns in excised larynx experiments via digital kymography, 598

Labyrinth
Fusion as evolutionary principle of vertebrate labyrinth, 845

Lamina propria
Cell density of lamina propria of neonatal vocal folds, 87
Lamina propria cellularity and collagen composition: integrated assessment of structure in humans, 299

Landmark
Anatomic study of middle fossa approach landmarks using image guidance system, 728

Laryngeal electromyography
Clinical and electrophysiological characteristics of larynx in myasthenia gravis, 656

Laryngeal transplantation
New mouse model for studying laryngeal transplantation, 465

Laryngomalacia
Impact of supraglottoplasty on aspiration in severe laryngomalacia, 259
Microdebrider-assisted supraglottoplasty for laryngomalacia, 592
Secondary airway lesions in infants with laryngomalacia, 37

Laryngopharyngeal reflux
Laryngopharyngeal reflux with sore throat: ultrastructural study of oropharyngeal epithelium, 362

Laryngoscopy
Clinical outcomes of bedside percutaneous dilatational tracheostomy with suspension laryngoscopy for airway control, 91

Laser
Endoscopic carbon dioxide laser Zenker's diverticulotomy revisited, 512
Endoscopic laser resection of laryngeal cancer: is it oncologically safe? Position statement from the American Broncho-Esophagological Association, 399

Microlaryngoscopic and office-based injection of bevacizumab (Avastin) to enhance 532-nm pulsed KTP laser treatment of glottal papillomatosis, suppl 201

Leak
Delayed cerebrospinal fluid leak following septoplasty, 636

Letters to Editor, 542, 686

Ligation
Sphenopalatine and anterior ethmoidal artery ligation for severe epistaxis, 639
Unilateral vocal fold paralysis in premature infants after ligation of patent ductus arteriosus: vascular clip versus suture ligature, 750

Lipopolysaccharide
Radiographic and micro–computed tomographic imaging of lipopolysaccharide-mediated bone resorption, 391

Litigation
Malpractice litigation involving iatrogenic surgical vocal fold paralysis: closed-claims review with recommendations for prevention and management, 6

Localization
Localization of recurrent thyroid cancer: technical challenge, 479 (commentary)
Ultrasound-guided needle localization of recurrent paratracheal thyroid cancer, 475

Lymph
Impact of distant metastasis in patients with cervical lymph node metastases from cancer of unknown primary site, 662
Thyroid lymphosonography: novel method for evaluating lymphatic drainage, 645

Malpractice
Malpractice litigation involving iatrogenic surgical vocal fold paralysis: closed-claims review with recommendations for prevention and management, 6

Marsupialization
Marsupialization of vocal fold retention cysts: voice assessment and surgical outcomes, 270

Mastoiditis
Acute mastoiditis in children: is computed tomography always necessary? 565
Preoperative and postoperative intracranial complications of acute mastoiditis, 118

Measurement
Measurement of cross-sectional dimensions of cricoid cartilage: computed tomographic study, 253

Memorials
Cohen, Seymour R., MS, MD, 397
Norris, Charles M., MD, 754

Meniere's disease
Clinical significance of summating potential–action potential ratio and action potential latency difference for condensation and rarefaction clicks in Meniere's disease, 307
Impact of bilaterality and headache on health-related quality of life in Meniere's disease, 409
Study of vestibular evoked myogenic potentials in patients affected by Meniere's disease treated with endolymphatic mastoid shunt, 852

Metastasis
Impact of distant metastasis in patients with cervical lymph node metastases from cancer of unknown primary site, 662

Micro–computed tomography
Radiographic and micro–computed tomographic imaging of lipopolysaccharide-mediated bone resorption, 391

Microdebrider
Comparison of intraoperative bleeding between microdebrider intracapsular tonsillectomy and electrocautery tonsillectomy, 698
Microdebrider-assisted supraglottoplasty for laryngomalacia, 592

Midline cervical cleft
Midline cervical cleft: rare congenital anomaly, 786

Migrainous vertigo
Locus for familial migrainous vertigo disease maps to chromosome 5q35, 670

Mixed otosclerosis
Surgical and medical treatment of hearing loss in mixed otosclerosis, 859

Model
Flow fields and acoustics in unilateral scarred vocal fold model, 44
Model of evoked rabbit phonation, 51
New mouse model for studying laryngeal transplantation, 465
Serial electromyography of thyroarytenoid muscles using NIM-Response system in canine model of vocal fold paralysis, 56
Surgical method to create vocal fold injuries in mice, 131

Monitoring
Normal values for pharyngeal pH monitoring, 166

Mucosa
Demonstration of nasopharyngeal and middle ear mucosal biofilms in animal model of acute otitis media, 292
Expression and distribution of hyaluronic acid and CD44 in unphonated human vocal fold mucosa, 773

Mucus
Prostaglandin E_2 receptor EP2, EP3, and EP4 agonists inhibit antigen-induced mucus hypersecretion in nasal epithelium of sensitized rats, 536

Multiple sclerosis
Use of neuromuscular electrostimulation in treatment of dysphagia in patients with multiple sclerosis, 241

Muscle
Model of evoked rabbit phonation, 51

Music
Self-reported listening habits and enjoyment of music among adult cochlear implant recipients, 350

Mutation
Audiometric and vestibular features in second Dutch DFNA-20/26 family with novel mutation in *ACTG1*, 382
Mild and variable audiometric and vestibular features in third DFNA15 family with novel mutation in *POU4F3*, 313
Prothrombotic gene mutations in patients with sudden sensorineural hearing loss and cardiovascular thrombotic disease, 205

Myasthenia gravis
Clinical and electrophysiological characteristics of larynx in myasthenia gravis, 656

Mycobacterium chelonae
Mycobacterium chelonae infections involving head and neck, 714

Myopericarditis
Acute myopericarditis complicating acute tonsillitis: prospective study, 556

Myringoplasty
Equine versus bovine pericardium in transmeatal underlay myringoplasty, 287

Nasopharynx
Endoscopic resection of juvenile nasopharyngeal angiofibroma, 764
Hyperfractionated radiotherapy: improvement of survival in locally advanced nasopharyngeal carcinoma, 442

Needle
Ultrasound-guided needle localization of recurrent paratracheal thyroid cancer, 475

Neonate
Cell density of lamina propria of neonatal vocal folds, 87

Nerve
Anatomy of optic canal: computed tomography study of endoscopic nerve decompression, 839
Characteristics of experimental recurrent laryngeal nerve surgical injury in dogs, 575
Diagnosis and prognosis of iatrogenic injury of recurrent laryngeal nerve, 506
Local neurotoxins for prevention of laryngeal synkinesis after recurrent laryngeal nerve injury, 887
Postviral vagal neuropathy, 247
Preserved regeneration and functional recovery of injured recurrent laryngeal nerve after secondary surgical repair in adult rats, 73
Radiographic analysis of cochlear nerve vascular compression, 356

Node
Impact of distant metastasis in patients with cervical lymph node metastases from cancer of unknown primary site, 662

Noise
Impulse noise: theoretical solutions to quandary of cochlear protection, 417

Norris, Charles M., MD, 1915-2008, 754

Nose
Assessing additional disease burden of polyps in chronic rhinosinusitis, 185
Use of nasal septal bone to straighten deviated septal cartilage in correction of deviated nose, 488

Obituaries
Cohen, Seymour R., MS, MD, 397
Norris, Charles M., MD, 754

Obstruction
Unilateral true vocal fold synkinesis presenting with airway obstruction, 587

Olfaction
Improvement of olfaction after endoscopic sinus surgery in smokers and nonsmokers, 13

Optic canal
Anatomy of optic canal: computed tomography study of endoscopic nerve decompression, 839

Osteomyelitis
Mycobacterium chelonae infections involving head and neck, 714

Osteophyte
Hypertrophic anterior cervical osteophytes causing dysphagia and airway obstruction, 703

Otitis externa
Change of external auditory canal pH in acute otitis externa, 769

Otitis media
Biofilm density in pediatric nasopharynx: recurrent acute otitis media versus obstructive sleep apnea, 519
Demonstration of nasopharyngeal and middle ear mucosal biofilms in animal model of acute otitis media, 292

Otosclerosis
Surgical and medical treatment of hearing loss in mixed otosclerosis, 859

Papillary thyroid carcinoma
Clinicopathologic features and outcome of oncocytic variant of papillary thyroid carcinoma, 374

Papillomavirus
Commentary on "Dysplasia in Adults With Recurrent Respiratory Papillomatosis: Incidence and Risk Factors," 486 (commentary)
Dysplasia in adults with recurrent respiratory papillomatosis: incidence and risk factors, 481
Microlaryngoscopic and office-based injection of bevacizumab (Avastin) to enhance 532-nm pulsed KTP laser treatment of glottal papillomatosis, suppl 201
Prevalence, morphology, and prognosis of human papillomavirus in tonsillar cancer, 742

Paralysis
Malpractice litigation involving iatrogenic surgical vocal fold paralysis: closed-claims review with recommendations for prevention and management, 6
Respiration-related laryngeal electromyography in children with bilateral vocal fold paralysis, 791
Serial electromyography of thyroarytenoid muscles using NIM-Response system in canine model of vocal fold paralysis, 56
Unilateral vocal fold paralysis in premature infants after ligation of patent ductus arteriosus: vascular clip versus suture ligature, 750

Paranasal sinus
The changing face of paranasal sinus fungus balls, 500

Parotidectomy
Superficial parotidectomy via facelift incision, 276

Patent ductus arteriosus
Unilateral vocal fold paralysis in premature infants after ligation of patent ductus arteriosus: vascular clip versus suture ligature, 750

Pepsin
Pepsin in nonacidic refluxate can damage hypopharyngeal epithelial cells, 677

Pericardium
Equine versus bovine pericardium in transmeatal underlay myringoplasty, 287

Peroxisome proliferator–activated receptor gamma agonist
Effect of peroxisome proliferator–activated receptor gamma agonists on myofibroblast differentiation and collagen production in nasal polyp–derived fibroblasts, 721

pH
Change of external auditory canal pH in acute otitis externa, 769
Comparison of oropharyngeal pH probe and standard dual pH probe for diagnosis of laryngopharyngeal reflux, 1
Normal values for pharyngeal pH monitoring, 166

Pharyngotomy
Extended lateral pharyngotomy for selected squamous cell carcinomas of lateral tongue base, 428

Phonation
Effect of dehydration on phonation threshold flow in excised canine larynges, 154
Model of evoked rabbit phonation, 51

Piezoelectric surgical device
Piezoelectric surgical device in endoscopic sinus surgery: initial clinical experience, 621

Pituitary surgery
Endoscopic approach for pituitary surgery improves rhinologic outcomes, 630

Pneumonia
Predictors of aspiration pneumonia following radiotherapy for head and neck cancer, 811

Polyp
Assessing additional disease burden of polyps in chronic rhinosinusitis, 185
Effect of peroxisome proliferator–activated receptor gamma agonists on myofibroblast differentiation and collagen production in nasal polyp–derived fibroblasts, 721
Human nasal polyp microenvironments maintained in viable and functional state as xenografts in NOD-*scid IL2rγ*^{null} mice, 866

Postviral vagal neuropathy, 247

Potassium carbonate
Randomized, placebo-controlled evaluation of chlorobutanol, potassium carbonate, and irrigation in cerumen removal, 552

Potential
Clinical significance of summating potential–action potential ratio and action potential latency difference for condensation and rarefaction clicks in Meniere's disease, 307
Influence of blood pressure manometer feedback on parameters of vestibular evoked myogenic potential test, 281
Study of vestibular evoked myogenic potentials in patients affected by Meniere's disease treated with endolymphatic mastoid shunt, 852

POU4F3
Mild and variable audiometric and vestibular features in third DFNA15 family with novel mutation in *POU4F3*, 313

Prader-Willi syndrome
Efficacy and safety of adenotonsillectomy for pediatric obstructive sleep apnea in Prader-Willi syndrome, 267

Pregnancy
Advanced oral tongue cancer in 22-year-old pregnant woman, 21

Presentation
Initial anatomic geographic presentation of glottal dysplasia, 321

Pressure
Indirect estimation of laryngeal resistance via airflow redirection, 124

Probe
Comparison of oropharyngeal pH probe and standard dual pH probe for diagnosis of laryngopharyngeal reflux, 1

Prostaglandin
Prostaglandin E2 receptor EP2, EP3, and EP4 agonists inhibit antigen-induced mucus hypersecretion in nasal epithelium of sensitized rats, 536

Protection
Impulse noise: theoretical solutions to quandary of cochlear protection, 417

Radiotherapy
Hyperfractionated radiotherapy: improvement of survival in locally advanced nasopharyngeal carcinoma, 442
Predictors of aspiration pneumonia following radiotherapy for head and neck cancer, 811

Reconstruction
Comparison of pediatric Voice Handicap Index scores with perceptual voice analysis in patients following airway reconstruction, 581
Postauricular approach atticotomy: modified closed technique with reconstruction of scutum with cymbal cartilage, 199

Recovery
Quantifying vocal fatigue recovery: dynamic vocal recovery trajectories after vocal loading exercise, 449

Recurrent croup
Utility of bronchoscopy for recurrent croup, 495

Recurrent laryngeal nerve
Characteristics of experimental recurrent laryngeal nerve surgical injury in dogs, 575
Diagnosis and prognosis of iatrogenic injury of recurrent laryngeal nerve, 506
Local neurotoxins for prevention of laryngeal synkinesis after recurrent laryngeal nerve injury, 887

Recurrent respiratory papillomatosis
Dysplasia in adults with recurrent respiratory papillomatosis: incidence and risk factors, 481

Recurrent thyroid cancer
Localization of recurrent thyroid cancer: technical challenge, 479 (commentary)

Reflectance
Anatomy-based algorithms for detecting oral cancer using reflectance and fluorescence spectroscopy, 817

Reflex
Modulating effects of hypoxia and hypercarbia on glottic closing force, 148

Reflux
Comparison of oropharyngeal pH probe and standard dual pH probe for diagnosis of laryngopharyngeal reflux, 1
Influence of anxiety and depression on predictive value of Reflux Symptom Index, 687
Laryngopharyngeal reflux with sore throat: ultrastructural study of oropharyngeal epithelium, 362
Normal values for pharyngeal pH monitoring, 166
Pepsin in nonacidic refluxate can damage hypopharyngeal epithelial cells, 677

Regeneration
Preserved regeneration and functional recovery of injured recurrent laryngeal nerve after secondary surgical repair in adult rats, 73

Rehabilitation
Effectiveness of calcium hydroxylapatite paste in vocal rehabilitation, 546

Repair
Preserved regeneration and functional recovery of injured recurrent laryngeal nerve after secondary surgical repair in adult rats, 73

Research
A case for increased research on pediatric upper airway, 757

Resection
Endoscopic laser resection of laryngeal cancer: is it oncologically safe? Position statement from the American Broncho-Esophagological Association, 399

Resistance
Indirect estimation of laryngeal resistance via airflow redirection, 124

Respiration
Respiration-related laryngeal electromyography in children with bilateral vocal fold paralysis, 791

Retention cyst
Marsupialization of vocal fold retention cysts: voice assessment and surgical outcomes, 270

Rheology
Measurement of viscoelastic properties of vocal folds, 461

Rhinosinusitis
Assessing additional disease burden of polyps in chronic rhinosinusitis, 185
Endoscopic balloon dilation sinuplasty including ethmoidal air cells in chronic rhinosinusitis, 881
Safety and feasibility of balloon sinuplasty for treatment of chronic rhinosinusitis in children, 161

Role
Role of otolaryngologists in health care for homeless, 471

Ropivacaine
Ropivacaine peritonsillar infiltration for analgesia after adenotonsillectomy in children: randomized, double-blind, placebo-controlled study, 227

Scar
Flow fields and acoustics in unilateral scarred vocal fold model, 44
Implantation of atelocollagen sheet for treatment of vocal fold scarring and sulcus vocalis, 613
Surgical method to create vocal fold injuries in mice, 131

Section
Techniques of celloidin removal from temporal bone sections, 435

Semicircular canal
Benign paroxysmal positional vertigo: concomitant involvement of different semicircular canals, 113

Sensorineural hearing loss
Hearing loss progression and contralateral involvement in children with unilateral sensorineural hearing loss, 781

Septum
Delayed cerebrospinal fluid leak following septoplasty, 636
Use of nasal septal bone to straighten deviated septal cartilage in correction of deviated nose, 488

Silicone
Comparative study of vocal outcomes with silicone versus Gore-Tex thyroplasty, 405

Simulation
Multimodality education for airway endoscopy skill development, 81

Sinus
Additional disease burden from hay fever and sinusitis accompanying asthma, 651
Balloon dilation of frontal recess in patients with chronic frontal sinusitis and advanced sinus disease: initial report, 107
Improvement of olfaction after endoscopic sinus surgery in smokers and nonsmokers, 13
Piezoelectric surgical device in endoscopic sinus surgery: initial clinical experience, 621
Safety and feasibility of balloon sinuplasty for treatment of chronic rhinosinusitis in children, 161
Safety of ethmoid sinus drug-eluting catheter insertion, 708
The changing face of paranasal sinus fungus balls, 500

Sleep apnea
Biofilm density in pediatric nasopharynx: recurrent acute otitis media versus obstructive sleep apnea, 519
Sleep-related deglutition in patients with sleep apnea-hypopnea syndrome, 30

Smoking
Improvement of olfaction after endoscopic sinus surgery in smokers and nonsmokers, 13

Sonography
Thyroid lymphosonography: novel method for evaluating lymphatic drainage, 645

Sore throat
Laryngopharyngeal reflux with sore throat: ultrastructural study of oropharyngeal epithelium, 362

Spectroscopy
Anatomy-based algorithms for detecting oral cancer using reflectance and fluorescence spectroscopy, 817

Sponge
Atelocollagen sponge as stem cell implantation scaffold for treatment of scarred vocal folds, 805

Squamous cell carcinoma
Human papillomavirus–associated oropharyngeal squamous cell carcinomas: primary tumor burden and survival in surgical patients, 368

Stenosis
Groningen dilatation tracheoscope in treatment of moderate subglottic and tracheal stenosis, 329
Secondary airway lesions in infants with laryngomalacia, 37
Tracheal and tracheostomal hypergranulation and related stenosis in long-term cannulated patients: does tracheostomy procedure make difference? 876
Unusual fibrosclerotic lesion of laryngotracheal complex presenting as subglottic stenosis, 27

Subglottis
Role of subglottal shape in turbulence reduction, 232

Sudden sensorineural hearing loss
Prothrombotic gene mutations in patients with sudden sensorineural hearing loss and cardiovascular thrombotic disease, 205

Sulcus vocalis
Implantation of atelocollagen sheet for treatment of vocal fold scarring and sulcus vocalis, 613

Suplatast tosilate
Th2 cytokine inhibitor suplatast tosilate inhibits antigen-induced mucus hypersecretion in nasal epithelium of sensitized rats, 67

Supraglottoplasty
Impact of supraglottoplasty on aspiration in severe laryngomalacia, 259
Microdebrider-assisted supraglottoplasty for laryngomalacia, 592

Swallowing
Flexible endoscopic evaluation of swallowing in healthy young and older adults, 99
Penetration and aspiration in healthy older adults as assessed during endoscopic evaluation of swallowing, 190
Use of neuromuscular electrostimulation in treatment of dysphagia in patients with multiple sclerosis, 241

Synkinesis
Local neurotoxins for prevention of laryngeal synkinesis after recurrent laryngeal nerve injury, 887
Unilateral true vocal fold synkinesis presenting with airway obstruction, 587

Temporal bone
Techniques of celloidin removal from temporal bone sections, 435

Thyroid carcinoma
Clinicopathologic features and outcome of oncocytic variant of papillary thyroid carcinoma, 374

Thyroid cornu
Superior thyroid cornu syndrome: unusual cause of cervical dysphagia, 833

Thyroid lymphosonography
Thyroid lymphosonography: novel method for evaluating lymphatic drainage, 645

Thyroplasty
Comparative study of vocal outcomes with silicone versus Gore-Tex thyroplasty, 405
Long-term acoustic comparison of thyroplasty versus autologous fat injection, 827

Tongue
Advanced oral tongue cancer in 22-year-old pregnant woman, 21
Extended lateral pharyngotomy for selected squamous cell carcinomas of lateral tongue base, 428
Tongue base ultrasound: diagnostic tool for predicting obstructive sleep apnea, 179

Tonsil
Acute myopericarditis complicating acute tonsillitis: prospective study, 556
Comparison of intraoperative bleeding between microdebrider intracapsular tonsillectomy and electrocautery tonsillectomy, 698
Prevalence, morphology, and prognosis of human papillomavirus in tonsillar cancer, 742
Ropivacaine peritonsillar infiltration for analgesia after adenotonsillectomy in children: randomized, double-blind, placebo-controlled study, 227

Trachea
Bioengineered trachea with fibroblasts in rabbit model, 796

Tracheoscope
Groningen dilatation tracheoscope in treatment of moderate subglottic and tracheal stenosis, 329

Tracheostomy
Clinical outcomes of bedside percutaneous dilatational tracheostomy with suspension laryngoscopy for airway control, 91
Tracheal and tracheostomal hypergranulation and related stenosis in long-term cannulated patients: does tracheostomy procedure make difference? 876

Transforming growth factor
Effects of transforming growth factor–β1 on human vocal fold fibroblasts, 218

Transplantation
New mouse model for studying laryngeal transplantation, 465

Turbulence
Role of subglottal shape in turbulence reduction, 232

Tympanic membrane
Temporalis fascia and cartilage-perichondrium composite shield grafts for reconstruction of tympanic membrane, 570

Ultrasound
Tongue base ultrasound: diagnostic tool for predicting obstructive sleep apnea, 179
Ultrasound-guided needle localization of recurrent paratracheal thyroid cancer, 475

Vagal neuropathy
Postviral vagal neuropathy, 247

Vascular compression
Radiographic analysis of cochlear nerve vascular compression, 356

Vertigo
Benign paroxysmal positional vertigo: concomitant involvement of different semicircular canals, 113
Locus for familial migrainous vertigo disease maps to chromosome 5q35, 670

Vestibule
Influence of blood pressure manometer feedback on parameters of vestibular evoked myogenic potential test, 281
Study of vestibular evoked myogenic potentials in patients affected by Meniere's disease treated with endolymphatic mastoid shunt, 852

Vibration
Typing vocal fold vibratory patterns in excised larynx experiments via digital kymography, 598

Vibroplasty
Monitored anesthesia care with target-controlled infusion in vibroplasty, 625

Viscoelastic properties
Measurement of viscoelastic properties of vocal folds, 461

Vitamin D
Prevalence of vitamin D deficiency among patients attending general otolaryngology clinic in South Auckland, 326

Vocal fatigue
Quantifying vocal fatigue recovery: dynamic vocal recovery trajectories after vocal loading exercise, 449

Vocal fold
Measurement of viscoelastic properties of vocal folds, 461

Voice
Comparison of pediatric Voice Handicap Index scores with perceptual voice analysis in patients following airway reconstruction, 581
Effects of transforming growth factor–β1 on human vocal fold fibroblasts, 218
Role of subglottal shape in turbulence reduction, 232
Vocal exercise versus voice rest following botulinum toxin injections: randomized crossover trial, 759

Xenograft
Human nasal polyp microenvironments maintained in viable and functional state as xenografts in NOD-*scid IL2rγ*^{null} mice, 866

Zenker's diverticulotomy
Endoscopic carbon dioxide laser Zenker's diverticulotomy revisited, 512